			(μmoles/min/mg*)
15	28.76	1.917	0.164
30	43.74	0.999	0.125
170	98.51	0.322	0.050
255	177.26	0.308	0.060

a1 cont.

* total quantity of enzymes in hydrolysis media -

IN THE CLAIMS:

1. (Amended) A method for extracting lipid fractions from marine and aquatic animal material, said method comprising the steps of:

(a) placing marine and aquatic animal material in a ketone solvent to achieve extraction of the soluble lipid fraction from said marine and aquatic animal material;

(b) separating the liquid and solid contents;

(c) recovering a first lipid-rich fraction from the liquid contents of step (b) by evaporation of the solvent present in the liquid contents;

(d) placing said solid contents in an organic solvent selected from the group of solvents consisting of alcohol and esters of acetic acid to achieve extraction of the remaining soluble lipid fraction from said marine and aquatic animal material;

(e) separating the liquid and solid contents;

(f) recovering a second lipid-rich fraction by evaporation of the solvent from the liquid contents of step (e);

(g) recovering the solid contents.

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4. (Amended) A method as in claim 1, wherein steps (b) and (d) are conducted under inert gas atmosphere.

5. (Amended) A method as in claim 1, wherein steps (b) and (e) are effected by techniques selected from filtration, centrifugation and sedimentation.

6. (Amended) A method as in claim 1 , wherein steps (c) and (f) are effected by techniques selected from vacuum evaporation, flash evaporation and spray drying.

7. (Amended) A method as in claim 1, wherein after step (b) and before step (c), the method additionally comprises the intervening step of washing the solid contents with the solvent and adding the resulting washing solution to the liquid contents of step (b).

8. (Amended) A method as in claim 1, wherein after step (e) and before step (f), the method additionally comprises the intervening step of washing the solid contents with the organic solvent selected in step (d).

9. (Amended) A method as in claim 1, wherein prior to step (a) the marine and aquatic animal material is finely divided.

10. (Amended) A method as in claim 1, wherein steps (a) and (b) are conducted at solvent temperatures of not more than about 5°C.

11. (Amended) A method as in claim 1, wherein said marine and aquatic animal is zooplancton.

12. (Amended) A method as in claim 11, wherein said zooplancton is selected from krill and *Calanus*.

Please cancel claim 13 without prejudice.

14. (Amended) A method as in claim 1, wherein said marine and aquatic animal is fish filleting by-products.

15. (Amended) A method for extracting an astaxanthin-and-canthaxantin-containing lipid fraction from a marine and aquatic animal material selected from zooplancton and fish filleting by-products, said method comprising the steps of:

(a) placing said animal material in a ketone solvent to achieve an extraction of the soluble lipid fraction from said marine and aquatic animal material;

(b) separating the liquid and solid contents;

(c) recovering a lipid-rich fraction from the liquid contents by evaporation of the solvent present in the liquid contents;

whereby an astaxanthin-and-canthaxantin-containing lipid fraction is obtained.

16.(Amended) A method for extracting a lipid fraction from a marine and aquatic animal material selected from zooplancton and fish filleting by-products, said method comprising the steps of:

(a) placing said animal material in a solvent mixture comprising acetone and ethanol to achieve an extraction of the soluble lipid fraction from said marine and aquatic animal material;

(b) separating the liquid and solid contents;

(c) recovering a lipid-rich fraction from the liquid contents by evaporation of the solvents present in the liquid contents;

whereby a lipid fraction is obtained.

17. (Amended) A method as in claim 15, wherein the animal material is selected from krill and *Calanus*.

Please cancel claim 18 without prejudice

19. (Amended) A method as in claim 15, wherein during step (a), the animal material is homogenized.

20. (Amended) A method as in claim 15, wherein steps (b) and (d) are conducted under inert gas atmosphere.

21. (Amended) A method as in claim 15, wherein step (b) is effected by a technique selected from filtration, centrifugation and sedimentation.

22. (Amended) A method as in claim 15, wherein step (c) is effected by a technique selected from vacuum evaporation, flash evaporation and spray drying.

23. (Amended) A method as in claim 15, wherein after step (b) and before step (c), the method additionally comprises a step of washing said solid contents with solvent and adding the resulting washing solution to the liquid contents of step (b).

24. (Amended) A method as in claim15, wherein prior to step (a) the marine and aquatic animal material is finely divided.

25. (Amended) A method as in claim 15, wherein steps (a) and (b) are conducted at solvent temperatures of not more than about 5°C.

26. (Amended) A krill lipid extract characterized in that the carotenoid content in asthaxanthin is at least about 75 mg/g of krill extract, and the carotenoid content in canthaxanthin is at least about 250 mg/g of krill extract.

a5 cont

27. (Amended) A method of lipid extraction as in claim 1, wherein the solid contents of step (b) is recovered and consists of a dehydrated residue containing active enzymes.

Please cancel claims 28 and 29 without prejudice

30. (Amended) A method of lipid extraction as in claim 15, wherein the solid contents of step (b) is recovered and consists of a dehydrated residue containing active enzymes.

31. (Amended) A method for extracting lipid fractions from marine and aquatic animal material, said method comprising the steps of:

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(a) placing marine and aquatic animal material in a ketone solvent to achieve extraction of the soluble lipid fraction from said marine and aquatic animal material;
(b) separating the liquid and solid contents;
(c) recovering a first lipid-rich fraction from the liquid contents of step (b) by evaporation of the solvent present in the liquid contents;
(d) placing said solid contents in an organic solvent selected from the group of solvents consisting of alcohol and esters of acetic acid to achieve extraction of the remaining soluble lipid fraction from said marine and aquatic animal material;
(e) separating the liquid and solid contents;
(f) recovering a second lipid-rich fraction by evaporation of the solvent from the liquid contents of step (e);

whereby lipid fractions are obtained.

32. (Amended) A method of lipid extraction as in claim 31, wherein the solid contents of step (b) is recovered and consists of a dehydrated residue containing active enzymes.

33. (Amended) A lipid fraction extracted from marine and aquatic animal material, by a method comprising the steps of:

(g) placing marine and aquatic animal material in a ketone solvent to achieve extraction of the soluble lipid fraction from said marine and aquatic animal material;

(h) separating the liquid and solid contents;

(i) recovering a first lipid-rich fraction from the liquid contents of step (b) by evaporation of the solvent present in the liquid contents;

(j) placing said solid contents in an organic solvent selected from the group of solvents consisting of alcohol and esters of acetic acid to achieve extraction of the remaining soluble lipid fraction from said marine and aquatic animal material;

(k) separating the liquid and solid contents;

(l) recovering a second lipid-rich fraction by evaporation of the solvent from the liquid contents of step (e);

(m) recovering the solid contents.

Please cancel claims 34 and 35 without prejudice.

36. (New) A method as in claim 1, wherein the ketone solvent is acetone.

37. (New) A method as in claim 1, wherein the alcohol is selected from the group of ethanol, isopropanol and *t*-butanol.

38. (New) A method as in claim 1, wherein the ester of acetic acid is ethyl acetate.

39. (New) A method as in claim 9, wherein the marine and aquatic animal material is finely divided to an average particle size of not more than 5mm.

40. (New) A method as in claim 15, wherein said marine and aquatic animal material is viscera.

41. (New) A method as in claim 15, wherein the ketone solvent is acetone.

42. (New) A method as in claim 16, wherein said marine and aquatic animal material is viscera.

43. (New) A method as in claim 16, wherein the animal material is selected from krill and *Calanus.*

44. (New) A method as in claim 24, wherein the animal material is finely divided to an average particle size of not more than 5mm.

45. (New) A krill lipid extract as in claim 26, wherein the carotenoid content in asthaxanthin is at least about 90 mg/g of krill extract.

46. (New) A krill lipid extract as in claim 26, wherein the carotenoid content in canthaxanthin is at least about 270 mg/g of krill extract.